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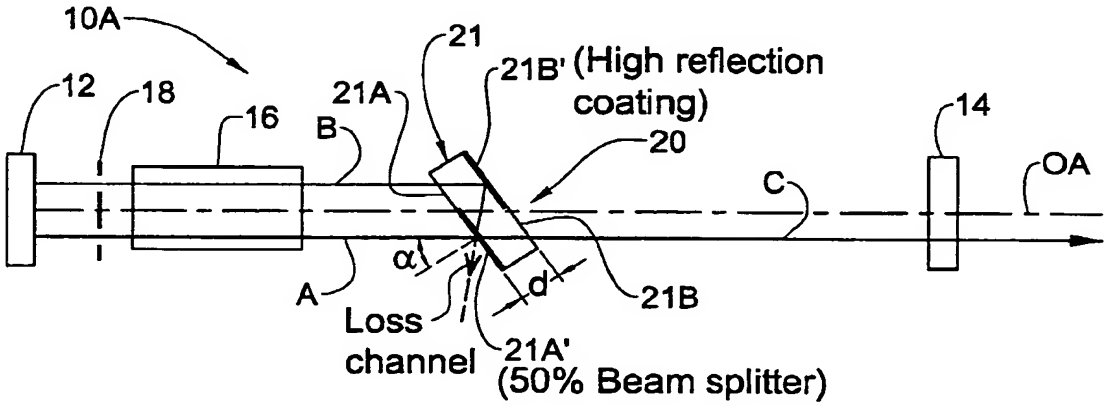
(54) Title: RESONATOR CAVITY CONFIGURATION AND METHOD



(57) Abstract: A resonator cavity (10A) and method and presented. The resonator cavity (10A) comprises at least one gain medium (16) and end reflectors (12, 14) which define together longitudinal modes of light in the cavity, and further comprises an intra-cavity beam coupler assembly (20). The beam coupler assembly (20) is configured to split light impinging thereon into a predetermined number of spatially separated light channels, and to cause phase locking and at least partial coherent combining of the light channels, having common longitudinal and transverse modes, in a double pass through the beam coupler assembly (20). The resonator cavity (10A) is configured and operable to produce at least one output combined light channel of a predetermined intensity profile.

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